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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/027,080	12/20/2001	John Laurence Minck JR.	267/166	9793

7590 10/05/2004

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EXAMINER
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BAXTER, JESSICA R

ART UNIT	PAPER NUMBER
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3731

DATE MAILED: 10/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/027,080	MINCK ET AL.	
	Examiner	Art Unit	
	Jessica R Baxter	3731	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 16 July 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 2-4, 6-13 and 29-41 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2-4, 6-13 and 29-41 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 2, 4, 9, 13, 29-31 and 33-41 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 6,136,015 to Kurz et al.

Kurz discloses a vaso-occlusive device comprising a member having a first end, a second end, and a length extending between the first and second ends, the member having a first curvilinear portion, a second curvilinear portion, and a linear portion located next to first curvilinear portion, the linear portion being relatively straight, the first curvilinear portion having a first end and a second end, the linear portion having a first end and a second end, wherein the first end of the linear portion connects to the second end of the first curvilinear portion, and the second end of the linear portion is located closer to the second end of the first curvilinear portion than the first end of the first curvilinear portion when the member is in the relaxed portion (FIGS. 1-5); wherein the first and second curvilinear portions form a serpentine shape which are located immediately next to each other (FIG. 5) or are located at opposite ends of the member (FIGS. 1 and 3).

Kurz discloses that the first curvilinear portion has a first peak and the second curvilinear portion has a second peak, and a first line connecting the first peak and the

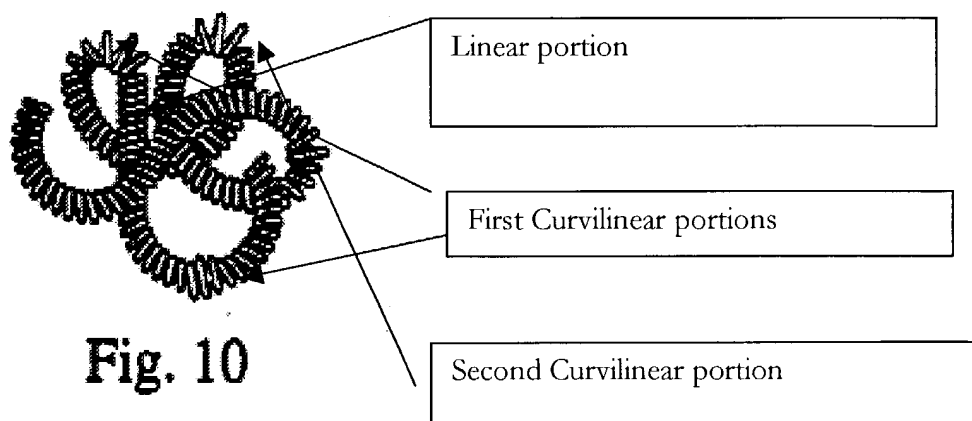
Art Unit: 3731

second peak does not intersect a second line extending between the first and second ends (FIG. 3).

Kurz discloses that the member comprises a coil and is stretch resistant (Column 9 lines 1-14).

3. Claims 2-4, 10 and 29-41 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,304,194 to Chee et al.

Chee discloses a vaso-occlusive device comprising a member having a first end, a second end, and a length extending between the first and second ends, the member having a first curvilinear portion, a second curvilinear portion, and a linear portion located next to first curvilinear portion, the linear portion being relatively straight, the first curvilinear portion having a first end and a second end, the linear portion having a first end and a second end, wherein the first end of the linear portion connects to the second end of the first curvilinear portion, and the second end of the linear portion is located closer to the second end of the first curvilinear portion than the first end of the first curvilinear portion when the member is in the relaxed portion (FIG. 10); wherein the first and second curvilinear portions form a serpentine shape which are located immediately next to each other or are located at opposite ends of the member.



Chee discloses that the first curvilinear portion has a first peak and the second curvilinear portion has a second peak, and a first line connecting the first peak and the second peak does not intersect a second line extending between the first and second ends (FIG. 10).

Chee discloses a plurality of fibers fixedly attached to the member (Column 1 lines 45-55).

### *Claim Rejections - 35 USC § 103*

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chee et al. 194 in view of U.S. Patent No. 5,690,666 to Berenstein et al.

Chee discloses the claimed invention except for one of the ends of the member being electrolytically detachable from a delivery device. Berenstein teaches that an

Art Unit: 3731

electrolytic connection between a vaso-occlusive member and a delivery device is advantageous since it forms a thrombus as the device is detached from the delivery device (Column 2 lines 36-54). It would have been obvious to one having ordinary skill in the art at the time the invention was made to detach the vaso-occlusive member of Chee electrolytically since it helps form a thrombus.

6. Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chee et al. '194 or Kurz et al. '015.

Chee and Kurz disclose the claimed invention except for the particular dimensions of the member's length and amplitude. It would have been an obvious matter of design choice to change the member's length and amplitude, since such a modification would have involved a mere change in the size of a component and there is no stated reason and solves no particular problem for the particular length and amplitude claimed (see paragraph 17). A change in size is generally recognized as being within the level of ordinary skill in the art. The length and amplitude of the Chee or Kurz device can be adapted for different sizes of aneurysms and would work equally well when made larger or smaller to suit the aneurysm.

7. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chee et al. '194 in view of Kurz et al. '015.

Chee discloses the claimed invention except for the distal end of the member having a J-shaped tip. Kurz teaches that the J-shaped tip is provided on the distal end of the device to prevent the device from puncturing the tissue, to prevent the coil from migrating into the artery, and to prevent coil realignment (Column 3 lines 21-58). It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the

Art Unit: 3731

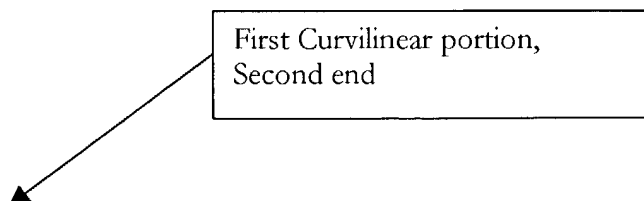
device of Chee with a J-shaped tip in order to prevent the device from puncturing the tissue, to prevent the coil from migrating into the artery, and to prevent coil realignment.

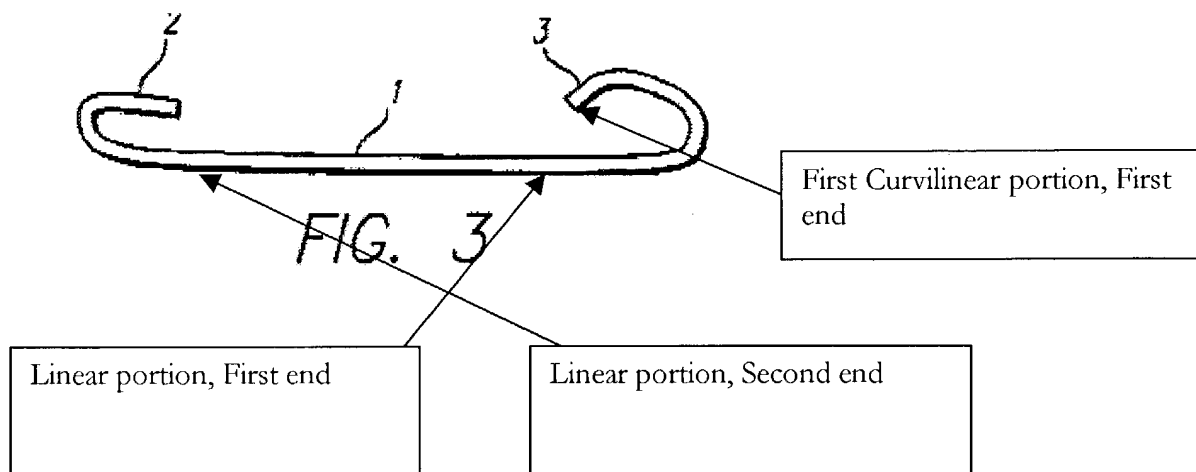
8. Claims 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chee et al. '194 in view of U.S. Patent No. 5,382,259 to Phelps et al.

Chee discloses the claimed invention except for a polymeric fiber wrapped around the surface of the member. Phelps teaches that a polymeric fiber is wrapped around the member to enhance the ability of the coil to fill the space within the vasculature and to increase embolic and tissue growth around the member (Column 1 lines 40-58). It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the device of Chee with a polymeric fiber wrapped around its member in order to enhance the ability of the member to fill the space and to increase embolic and tissue growth.

### *Response to Arguments*

9. Applicant's arguments filed July 16, 2004 have been fully considered but they are not persuasive.
10. Applicant argues that Kurz et al. '015 does not disclose "the second end of the linear portion is located closer to the second end of the first curvilinear portion than a first end of the first curvilinear portion when the member is in a relaxed configuration." Please see the attached Figure 3, for how this limitation is met.





### *Conclusion*

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jessica R Baxter whose telephone number is 703-305-4069. The examiner can normally be reached on M-F 8:30AM - 5:00PM.




Art Unit: 3731

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anh Tuan T Nguyen can be reached on 703-308-2154. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jessica R Baxter  
Examiner  
Art Unit 3731

  
JRB

  
10/01/2004

**VY BUI**  
**PRIMARY EXAMINER**